

## **Use of natural bitumen as raw materials for receiving bituminous insulating materials**

Kemalov R., Kemalov A.

*Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia*

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### **Abstract**

As raw materials for production of bitumen it is expedient to use tars heavy oil the naphthene aromatic basis with the insignificant maintenance of normal paraffin (mainly to 2%). Expansion of a source of raw materials of bituminous production due to involvement of the natural bitumen of the Nagornoye field (the Republic of Tatarstan) confirms relevance of researches subject. For increase in productivity of bituminous installations as initial raw materials of receiving insulating materials the high-boiling natural bitumen fractions allocated at an atmospheric and vacuum distillation were used. As raw materials of process of oxidation the fraction, boiling away above 440 ° C was used. In natural bitumen of the Nagorny field chemical affinity of components, characteristic for bitumen of high-resinous oil of a Yaregskoye field is revealed. It is established that the increase in quantity of asphaltens in special bitumen leads to premature embrittlement of coverings on its basis.

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### **Keywords**

Insulating material, Natural bitumen, Oxidation, Physical and mechanical properties., Structurallydynamic properties, Structure